

Memorandum

To: Regional Monitoring Contacts

From: Richard D. Scheffe, Leader /S/
Monitoring and Quality Assurance Group (MD-14)
US EPA

Date: June 15, 2000

Subject: Flagging and Valid PM_{2.5} Data

I would like to reiterate some information in the [memo from David Mobley of March 27, 2000 \(Attachment 1\)](#) which described the use of flags. Attachment C of the memo states "Flags would be placed only on data which the State/local was uncertain of its quality, not on data it considers to be invalid, which should not be entered." There has been some misconception among some agencies that EPA wants to see all the data. This is not true. State and local agencies have developed QAPP's and quality systems to determine data validity, and we do not want data that agencies truly feel is invalid to enter into AIRS.

Our current thinking is that flagged data have the potential to be validated, or be of benefit to a secondary use, such as network design. However, due to existing regulations/ guidance, there are cases where potentially valid data are labeled invalid. An example might be the violation of the 96-hour filter retrieval requirement which we hope to demonstrate has negligible impact on data quality. Another example is the lack of an approved QAPP prior to data collection. On the other hand, obviously poor quality data corroborated by a number of QC check failures should not be entered, despite the lack of explicit requirements. In short, we are asking QA managers who have developed their quality system to utilize their technical expertise and available quality control information during the data validation process.

The PM_{2.5} flags were generated for data that either did not meet a CFR criteria for which the State felt the quality of the data were acceptable, or for data that they were unsure of its quality. Based on conversations and my knowledge of the past, there were two ways an agency would address this issue: 1) not enter the data, or 2) enter the data as valid. Neither of these decisions is optimal because, in the first case, data of adequate quality for either NAAQS comparisons or other uses is not available or, in the second case, inappropriate data are used for the NAAQS or other evaluations.

Flags provide a way for the data generators to appropriately qualify data for the data users and will allow us to determine what acceptance criteria do not significantly effect quality and, therefore, remove it from the reference method. Flags also allow us the option to revise our requirements (regulations and guidance) over the next 2 years and salvage potentially useful

data that have been collected prior to such change.

We recognize the potential burden placed on data analysts as well as confusion generated by adding flags, and expect that issues raised by flags to be resolved prior to utilizing the data for designation purposes. Based on comments raised by participants at the recent PM_{2.5}

Workshop, clearly, more work is required among all of us on developing an effective flag policy. We do not intend to extend these flagging procedures to other criteria pollutants.

[Attachment](#)